**Step-by-Step Tutorial for the Use of the Sediment Temperature Database**

The database requires the software *ArcGIS* version 9.1 installed on your computer. *ArcGIS* is a product of the company ESRI.

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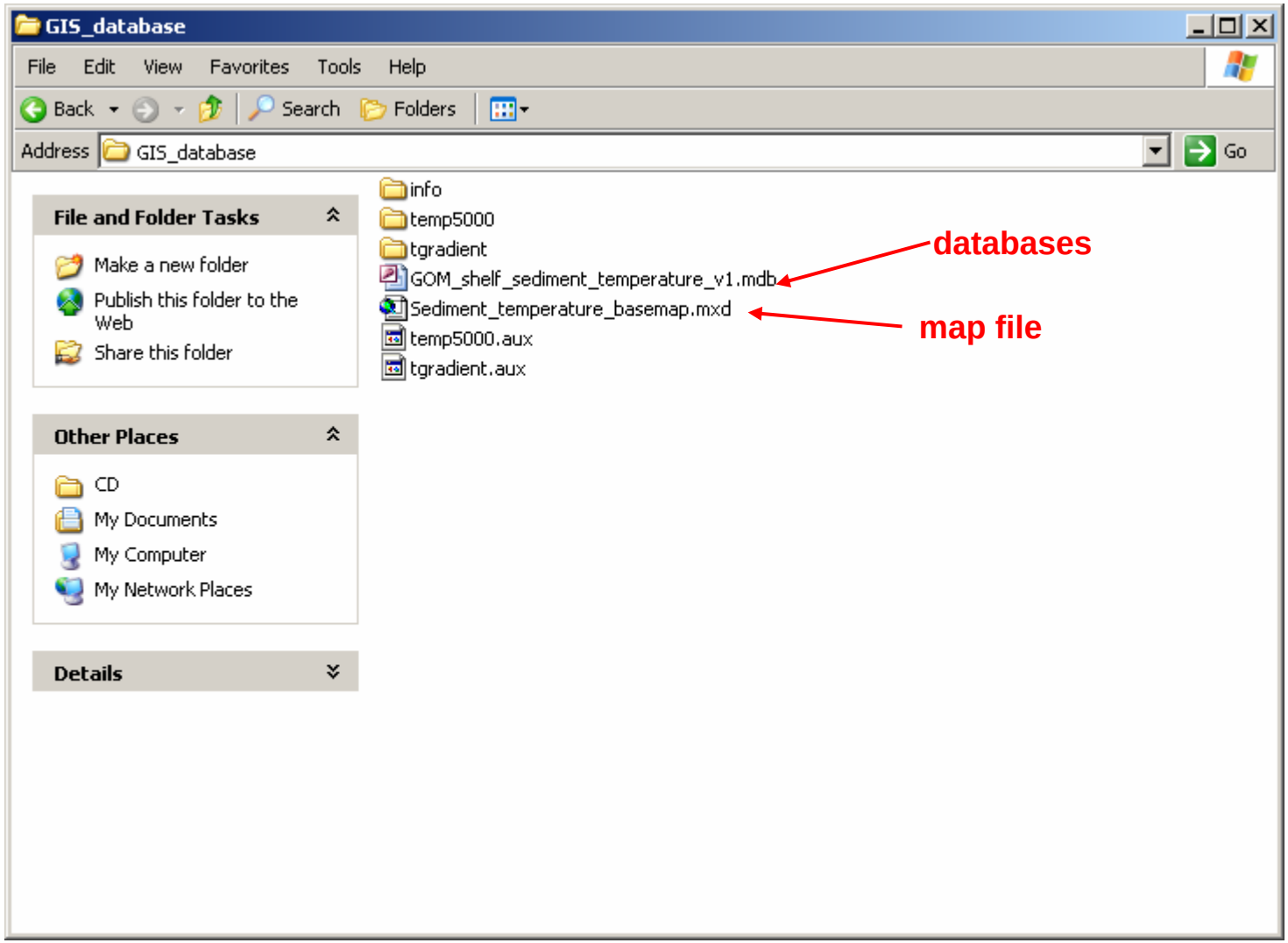
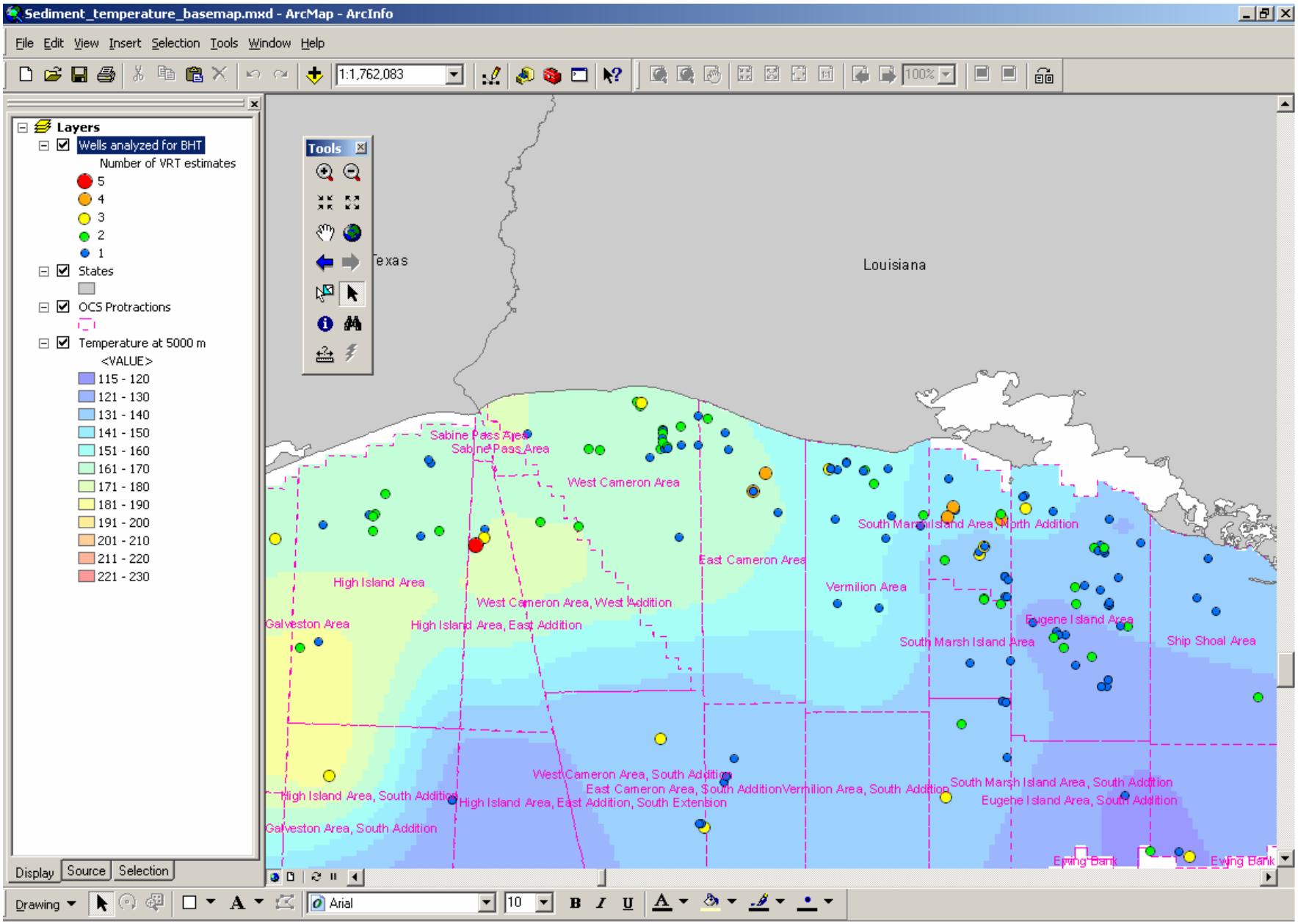
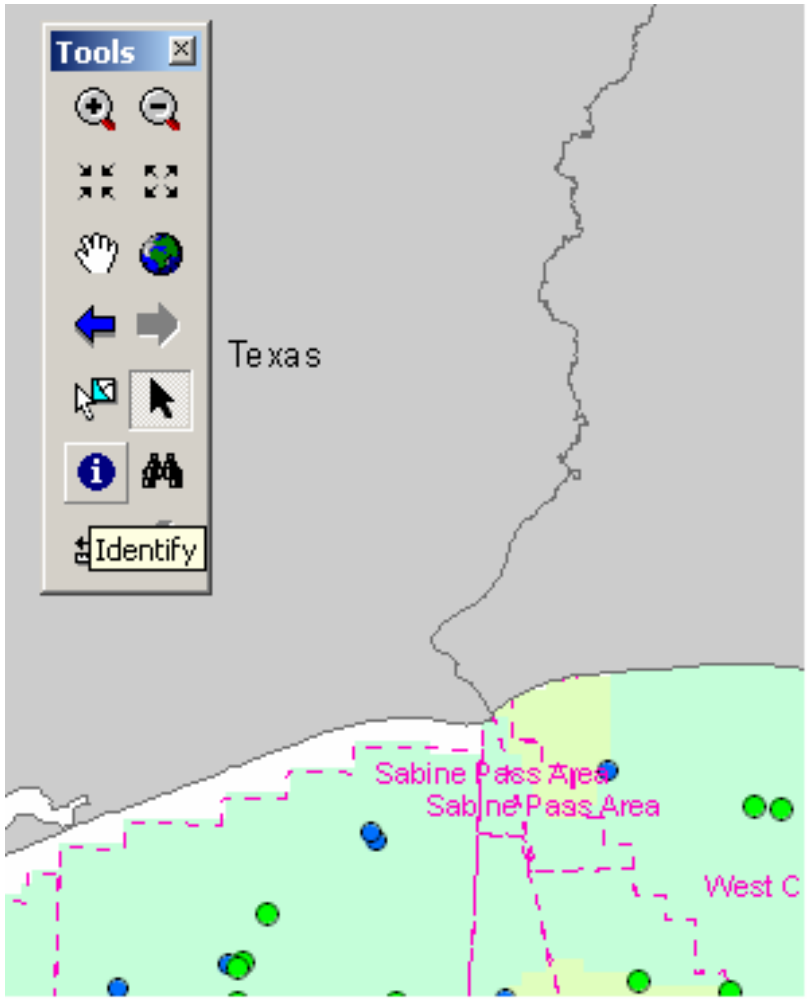
1. Make sure all the *ArcGIS* database files and map file are located within the same folder, double-click the map file to open it.



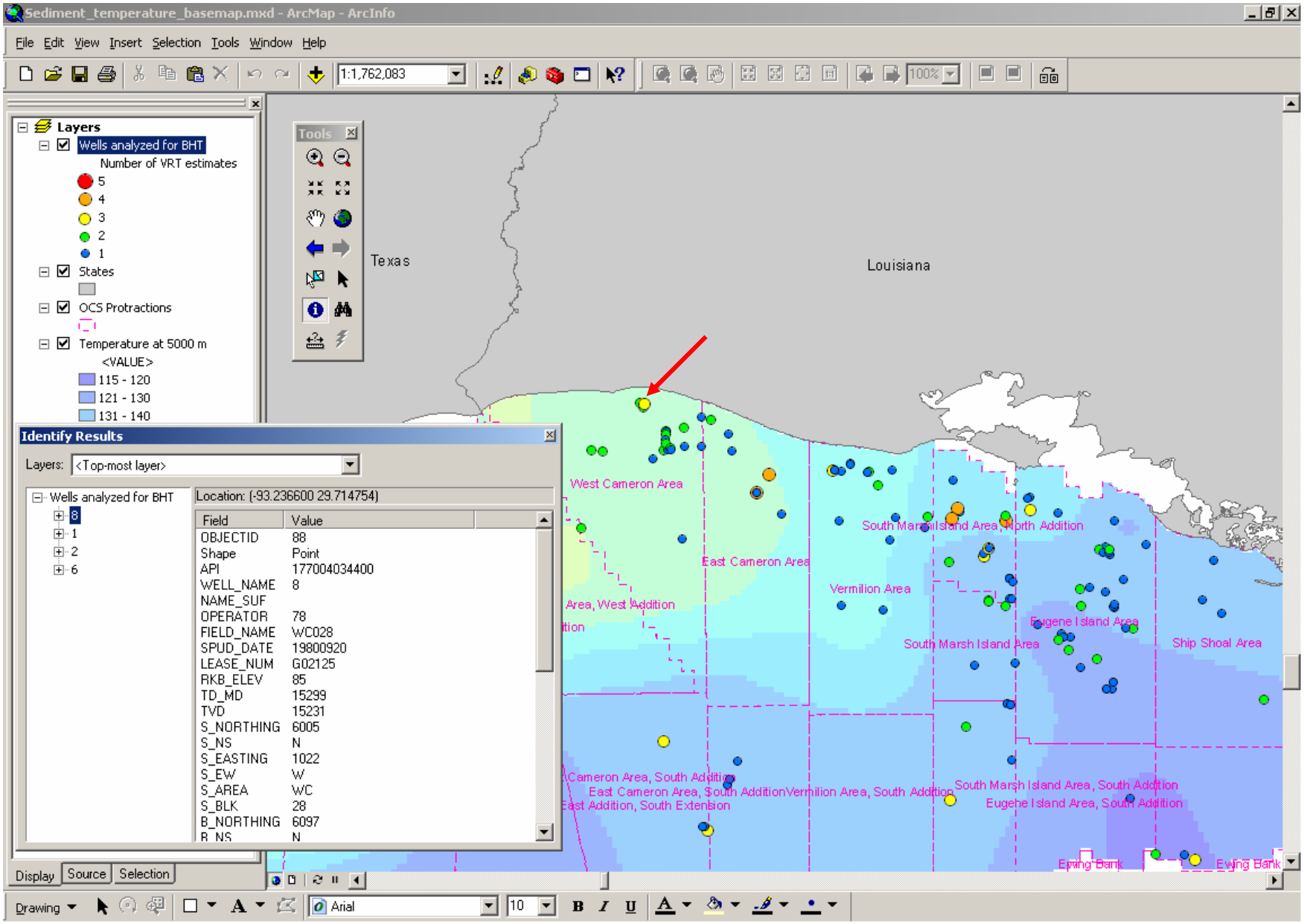
# 2. Well locations displayed with OCS protractions.



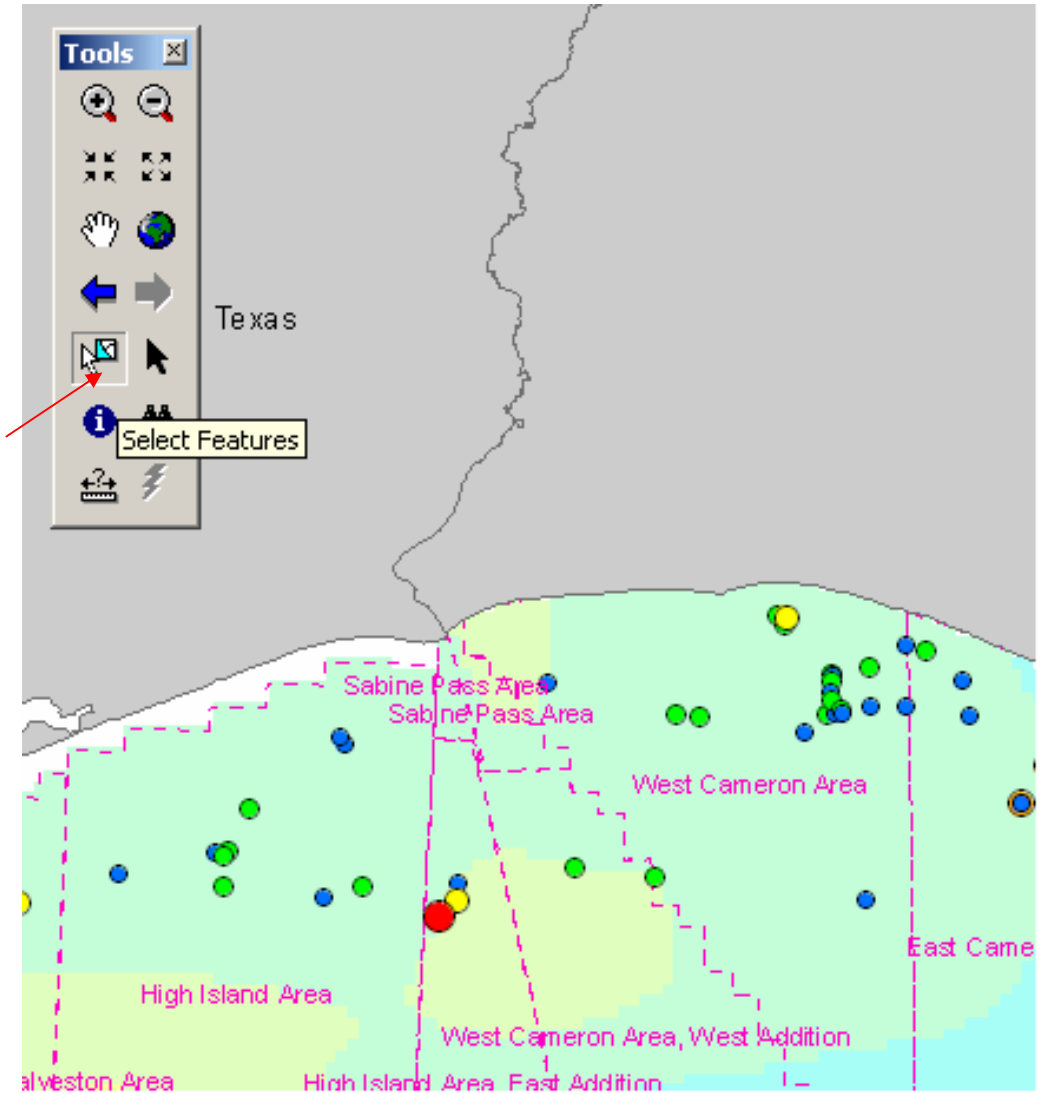
3. Use “Identify” tool to manual click on a circle that represents a well location.



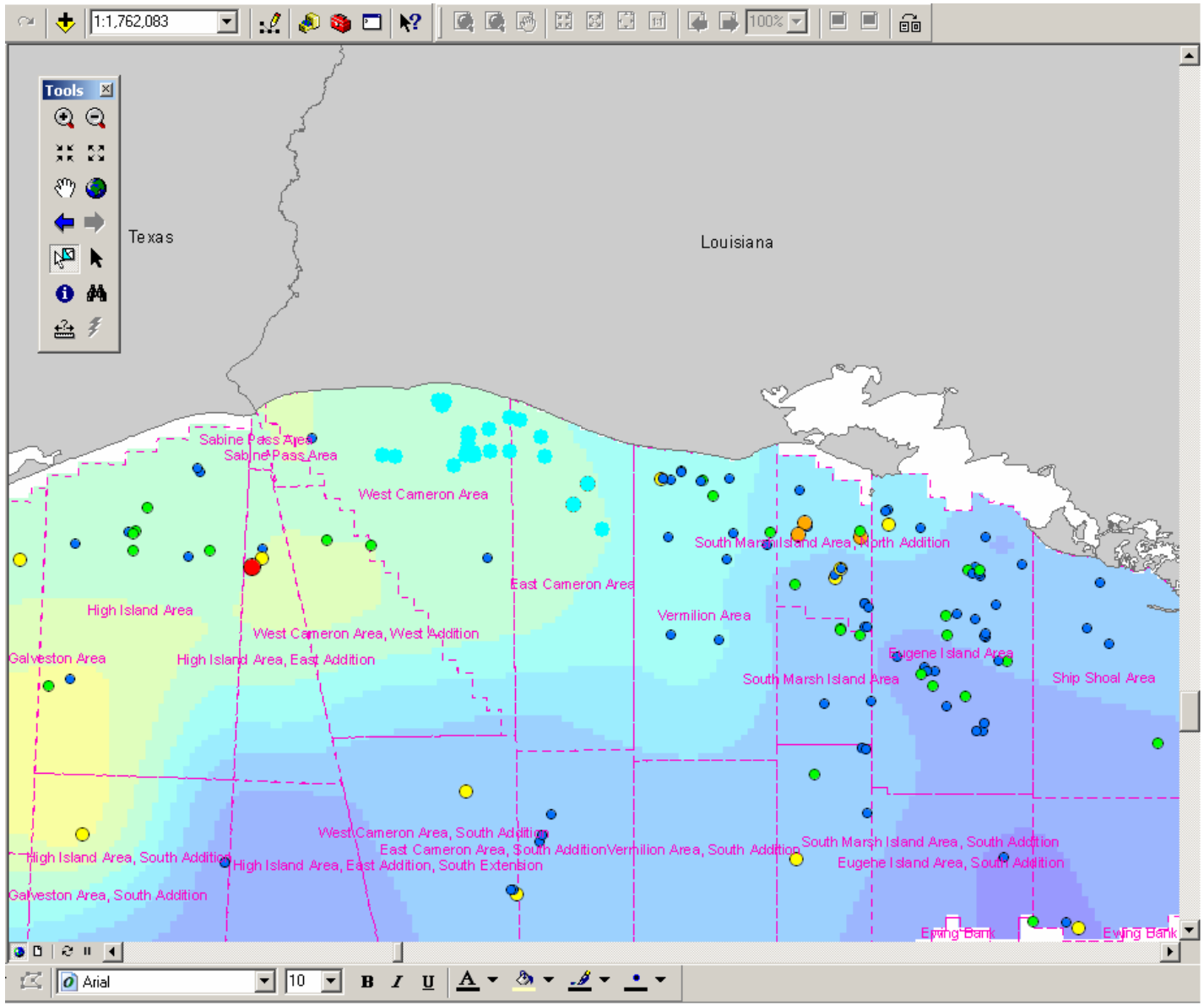
4. Attributes of the well (API, lease block name, etc.) appear. After getting the information you need, close the “Identify Results” window.



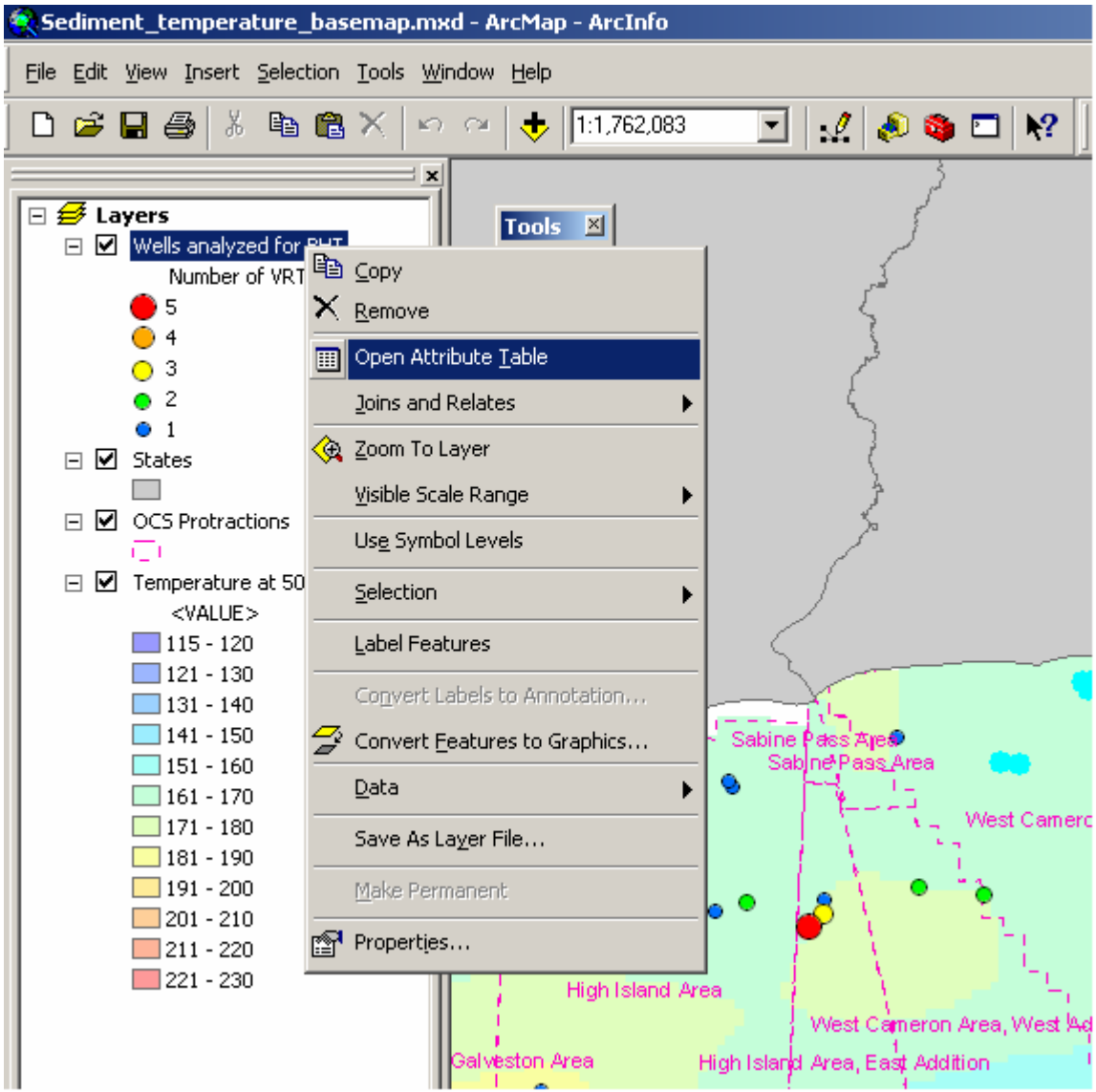
5. Switch to “Select Features” mode.



6. Draw a box around or click individually the wells of your interest. They become highlighted in light blue.



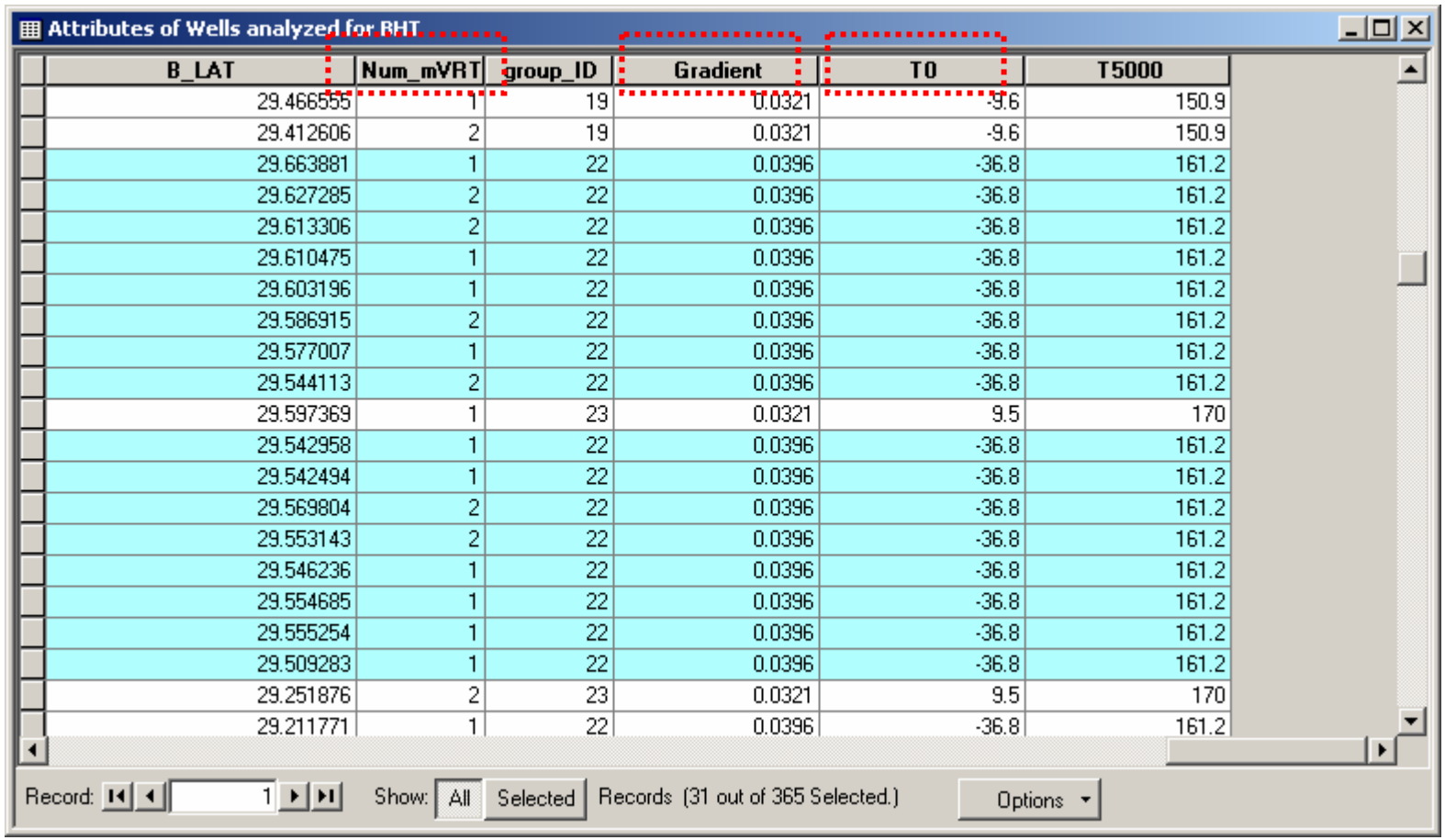
7. Open the attribute table for the well location database.



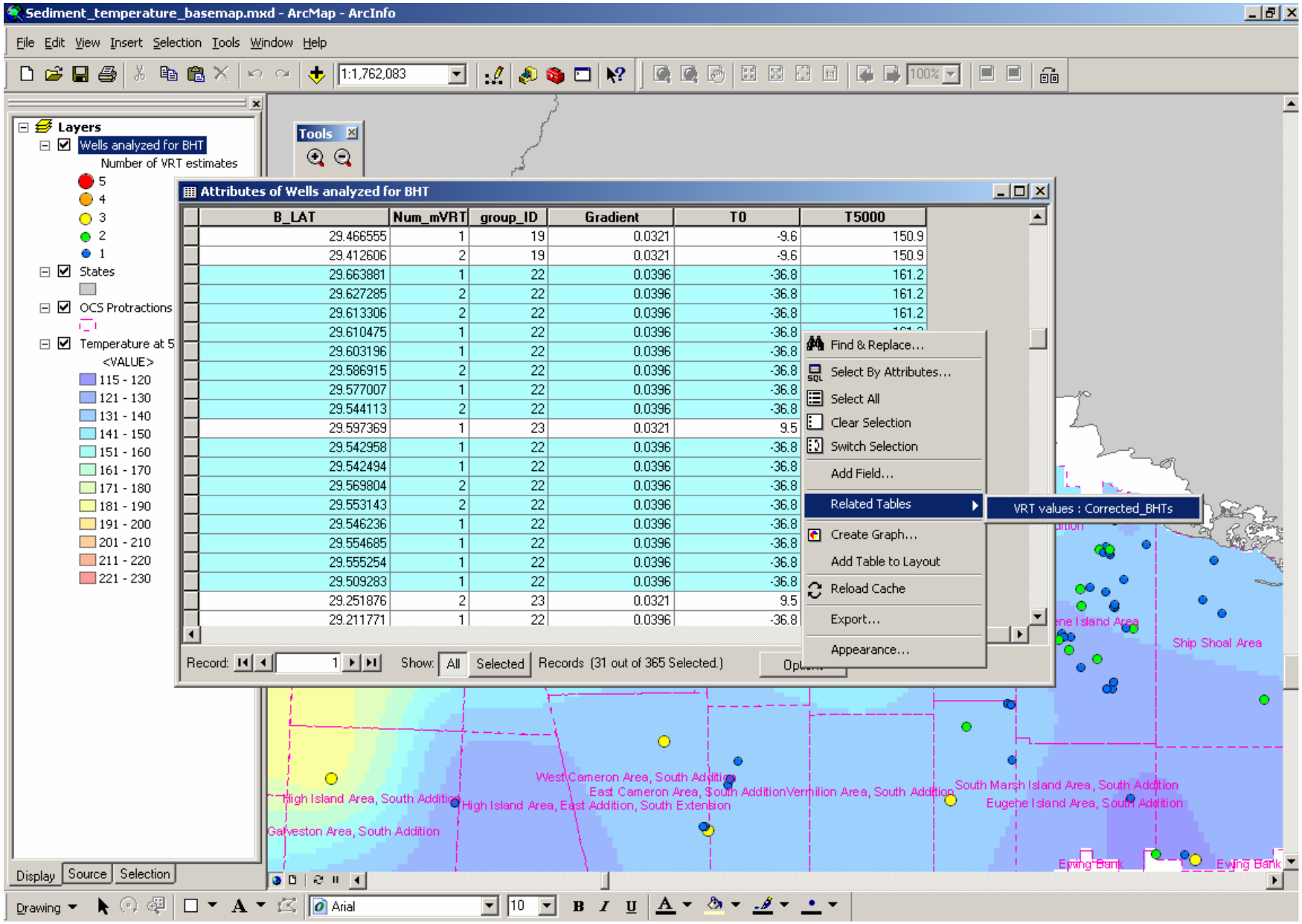
8. Find the highlighted row in the table, which displays attributes of the selected well. Scroll all the way to the right. The number of VRT estimates, the thermal gradient, etc. are listed.

If you want to estimate the temperature at any depth, use the formula:

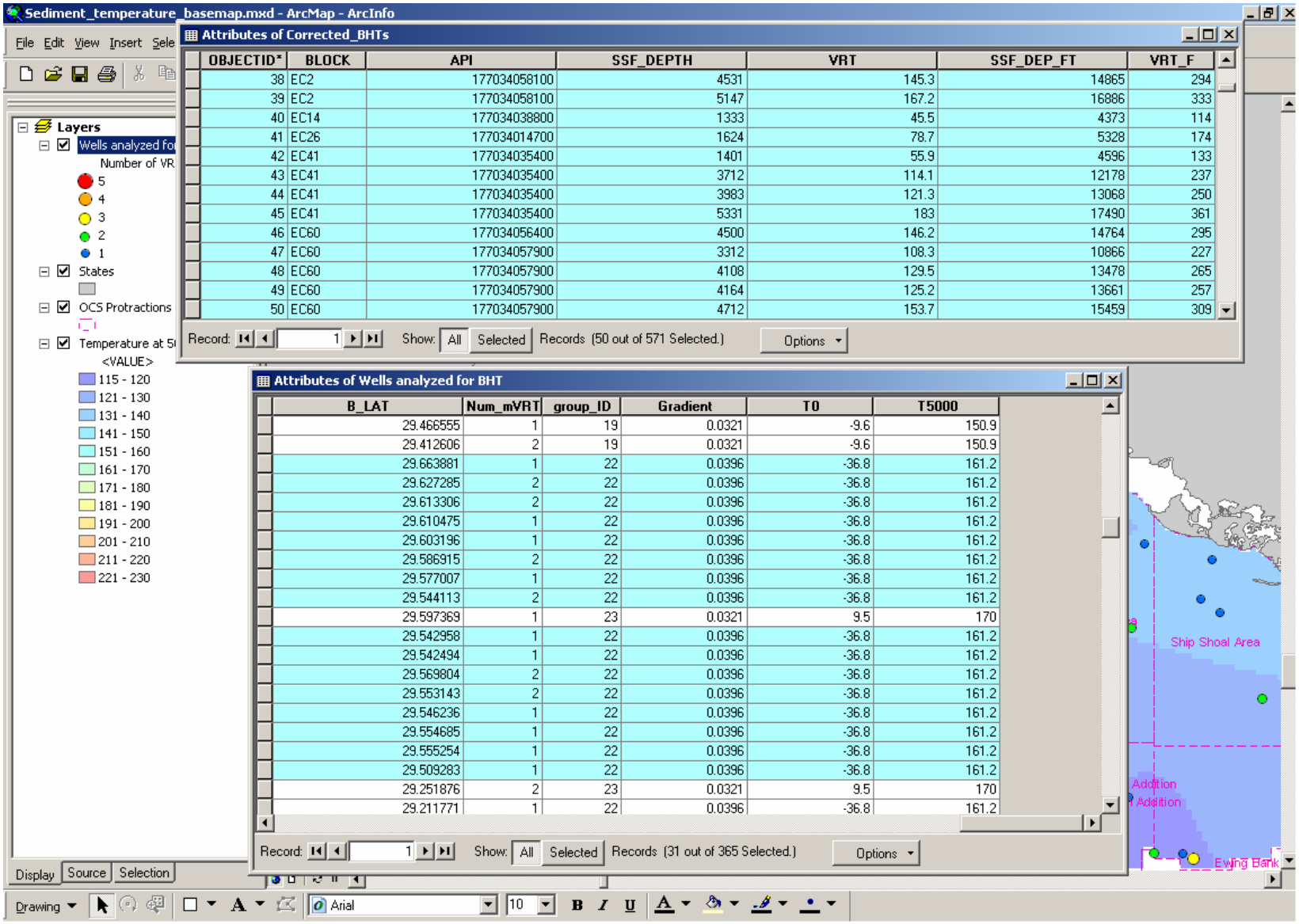
Temperature = T0 + gradient * depth.



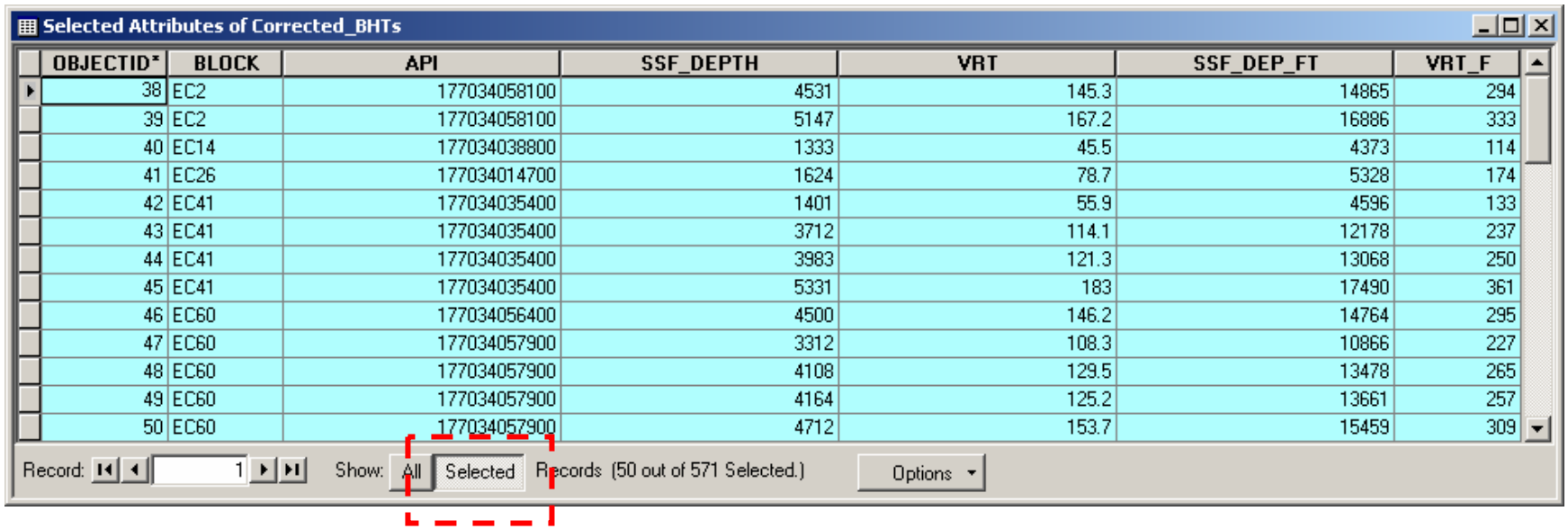
# 9. Go to “Options” then “Related Tables, VRT values”



10. The table for the corrected BHT (VRT) database appears.

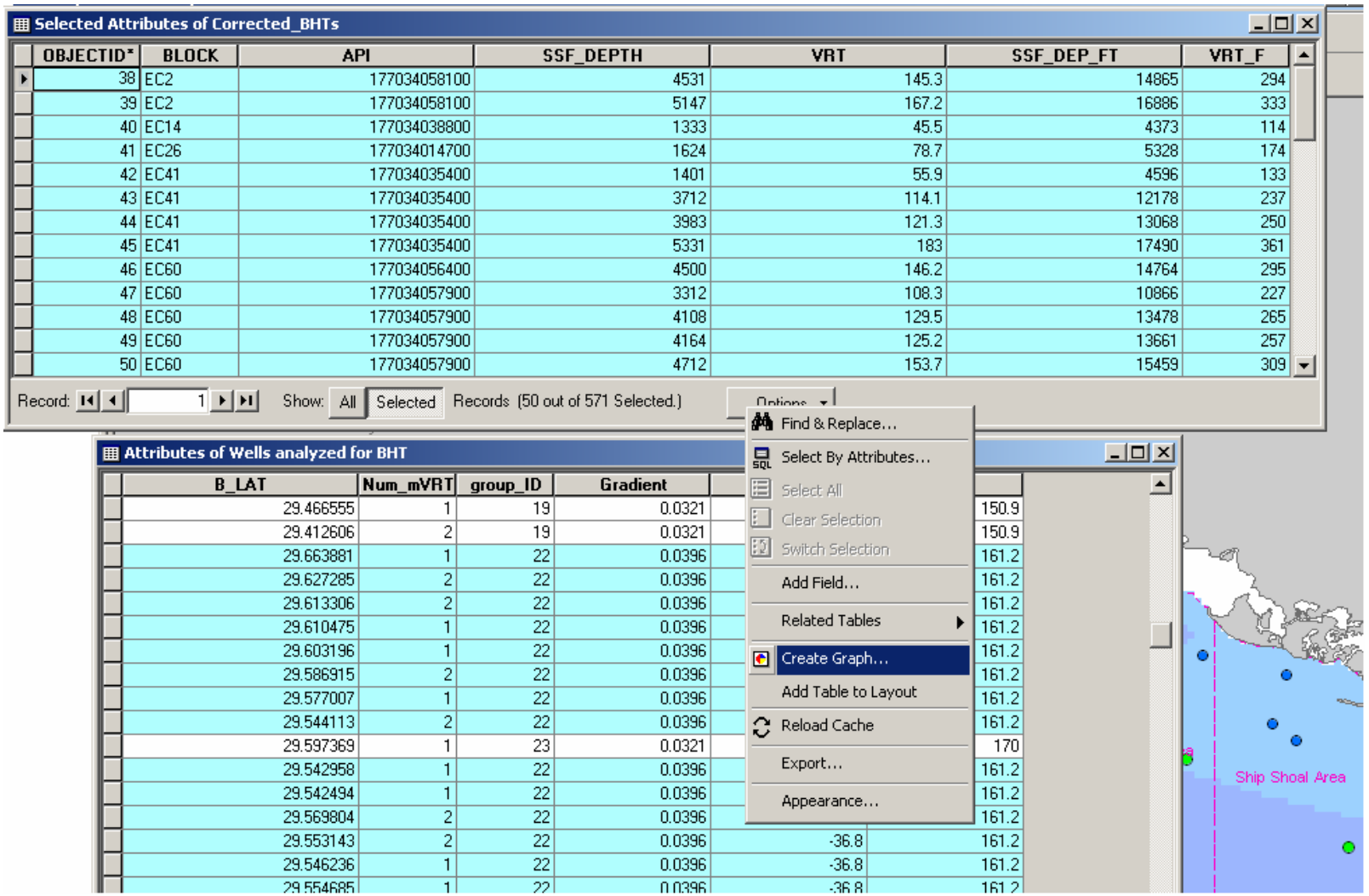


11. Click “selected”.  The table shows the VRTs and their sub-bottom depths in metric and English units.

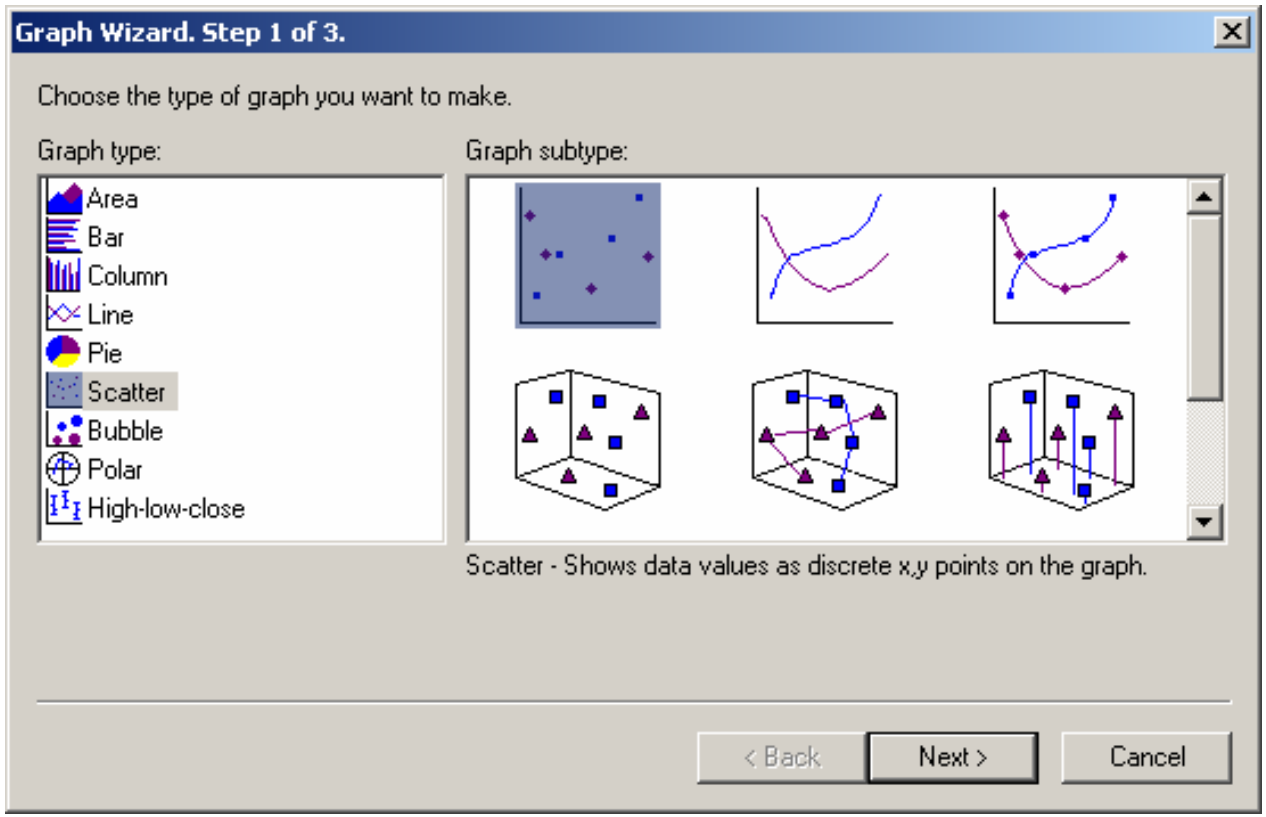



| OBJECTID* | BLOCK | API | SSF_DEPTH | VRT | SSF_DEP_FT | VRT_F |
|---|---|---|---|---|---|---|
| 38 | EC2 | 177034058100 | 4531 | 145.3 | 14865 | 294 |
| 39 | EC2 | 177034058100 | 5147 | 167.2 | 16886 | 333 |
| 40 | EC14 | 177034038800 | 1333 | 45.5 | 4373 | 114 |
| 41 | EC26 | 177034014700 | 1624 | 78.7 | 5328 | 174 |
| 42 | EC41 | 177034035400 | 1401 | 55.9 | 4596 | 133 |
| 43 | EC41 | 177034035400 | 3712 | 114.1 | 12178 | 237 |
| 44 | EC41 | 177034035400 | 3983 | 121.3 | 13068 | 250 |
| 45 | EC41 | 177034035400 | 5331 | 183 | 17490 | 361 |
| 46 | EC60 | 177034056400 | 4500 | 146.2 | 14764 | 295 |
| 47 | EC60 | 177034057900 | 3312 | 108.3 | 10866 | 227 |
| 48 | EC60 | 177034057900 | 4108 | 129.5 | 13478 | 265 |
| 49 | EC60 | 177034057900 | 4164 | 125.2 | 13661 | 257 |
| 50 | EC60 | 177034057900 | 4712 | 153.7 | 15459 | 309 |

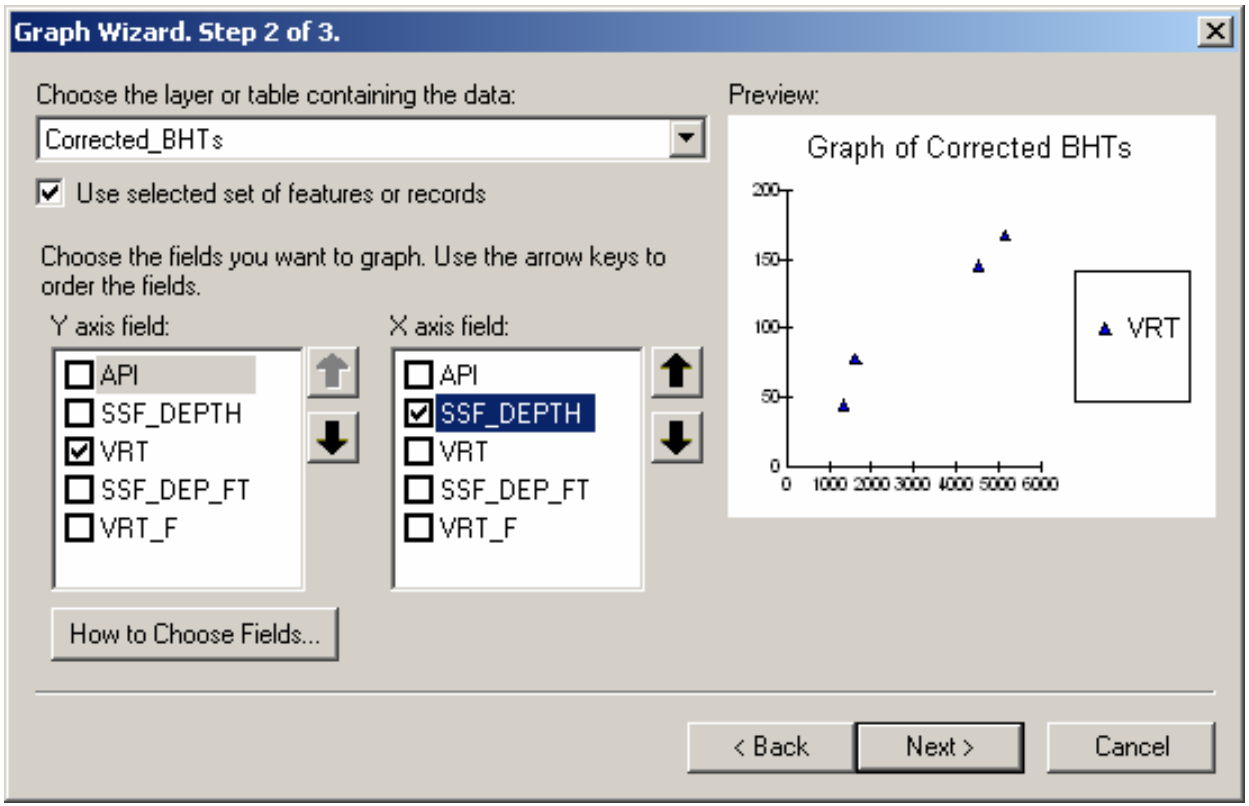
12. Click “Option”, and then “Create Graph …” to produce a temperature vs. depth plot.



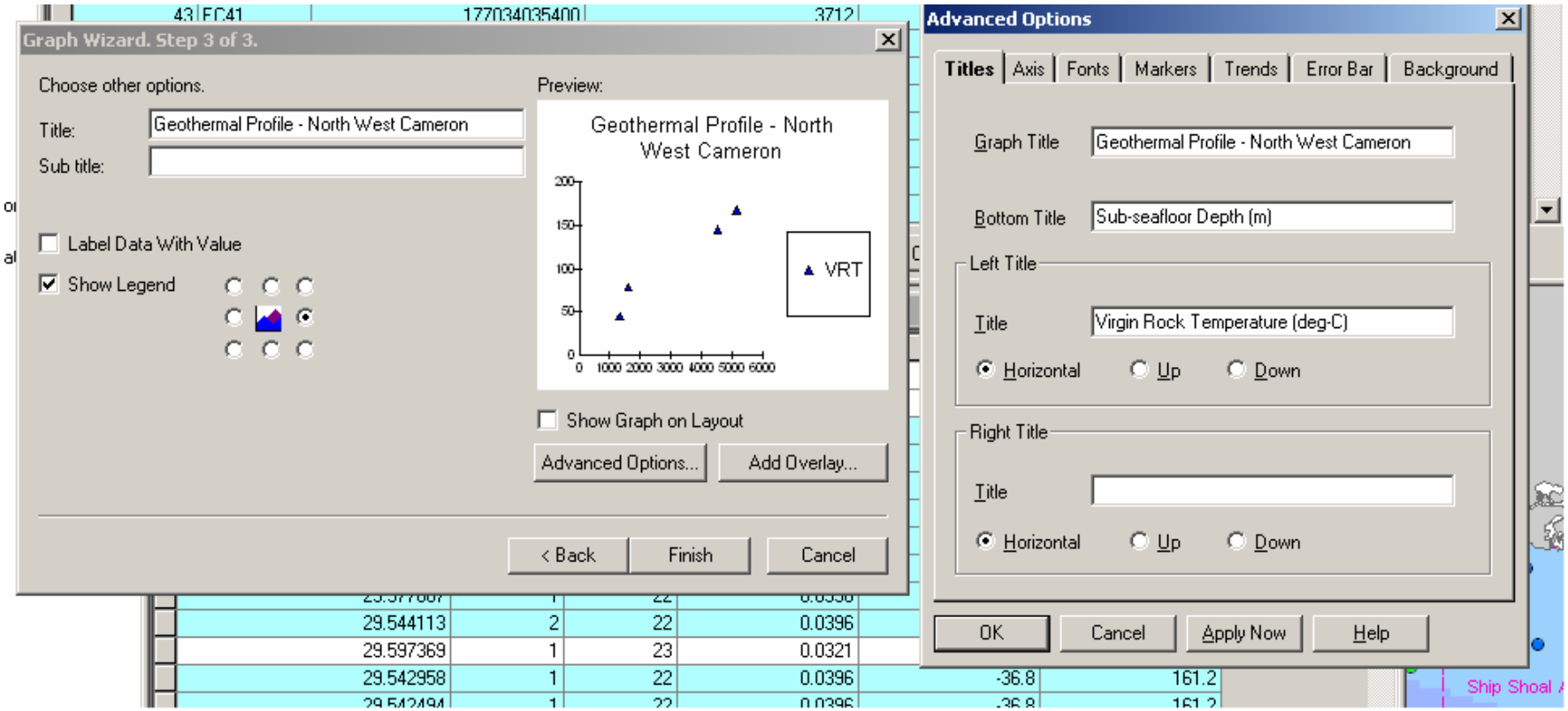
13. Choose “Scatter” graph type.



14. Set “VRT” for the Y-axis and “SSF_DEPTH” for the X-axis.



# 15. Give a title and axis labels.



16. Temperature vs. Depth plot is generated.